HISTORIC AMERICAN ENGINEERING RECORD

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HAER ALA 4-CENTR, 3-

SOUTHERN DUCTILE CASTING COMPANY, CENTERVILLE FOUNDRY 101 Airport Road Centerville Bibb County Alabama

HAER No. AL-130

NOTE: Photographs by Jet Lowe, August 1995.

VIEW OF INTERIOR OF SOUTHERN DUCTILE CASTING
COMPANY, CENTERVILLE FOUNDRY SHOWING MOLD MAKING
WITH PNEUMATIC JOLT SQUEEZE COPE AND DRAG MOLDING
MACHINES THAT INDIVIDUALLY MADE EITHER A COPE OR
DRAG AND A SMALL WHEELED MATCHPLATE JOLT-SQUEEZE
MACHINE THAT COMPRESSED AN ENTIRE MOLD AT A SINGLE
TIME USING A DOUBLE-SIDED PATTERN (MATCHPLATE).
ALSO SHOWN ARE RAILED PALLET CAR CONVEYORS THAT
CARRIED COMPLETED MOLDS FROM MOLDING MACHINES TO
POURING AREAS WHERE WORKERS USED SMALL OVERHEAD
CRANES TO LIFT JACKETS AND WEIGHTS ONTO THE MOLDS

TO HOLD THEM TOGETHER WHILE POURING.

AL-130-2 VIEW POURING PLATFORM SHOWING MOLD POURING JACKETS AND WEIGHTS AND, IN THE FOREGROUND, SAND RETURN FROM THE SHAKEOUT ACTUATING A SIMPLE LEVER SYSTEM THAT ADDED FRESH WATER TO THE SAND IN PREPARATION FOR ITS REUSE.

AL-130-3 VIEW POURING PLATFORM SHOWING MOLD POURING JACKETS AND WEIGHTS AND, IN THE FOREGROUND, SAND RETURN FROM THE SHAKEOUT ACTUATING A SIMPLE LEVER SYSTEM THAT ADDED FRESH WATER TO THE SAND IN PREPARATION FOR ITS REUSE.

AL-130-4 POURING IRON INTO THE LARGE JACKETED MOLDS.

AL-130-5 POURING IRON INTO THE LARGE JACKETED MOLDS.

AL-130-6

RUN OUTS OCCUR WHEN IRON HAS UNSEATED MOLDING SAND AND RUN OUT OF THE MOLD UNDER POURING JACKETS AND SPILLS ONTO THE MOLDING PLATFORM. WORKERS GENERALLY WAIT SEVERAL MINUTES FOR THE IRON TO SOLIDIFY AND, WHILE IT IS STILL RED-HOT, REMOVE IT FROM THE PLATFORM AND SCRAP THE MOLD.

SOUTHERN DUCTILE CASTING COMPANY,

CENTERVILLE FOUNDRY

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AL-130-11	SHAKE OUT WORKER DUMPING COOLED MOLDS ONTO THE VIBRATING CONVEYOR THAT TRANSPORTS SAND AND CASTINGS TO THE SEPARATION SCREEN.
AL-130-12	SHAKE OUT WORKER DUMPING COOLED MOLDS ONTO THE VIBRATING CONVEYOR THAT TRANSPORTS SAND AND CASTINGS TO THE SEPARATION SCREEN.
AL-130-13	DUMPING COOLED MOLDS FROM THE SHAKE OUT RAILS ONTO A VIBRATING CONVEYOR WHICH TRANSPORTS CASTINGS AND SAND TO A SEPARATION SCREEN WHICH SIFTS SAND ONTO BELT CONVEYORS BELOW THAT CARRY IT PAST SWITCH-ACTIVATED WATER INJECTORS TO SIMILAR SWITCH-ACTIVATED FRESH SAND ADDERS BEFORE TRANSPORTING IT TO THE SAND STORAGE BIN WHILE CASTINGS ARE EITHER MANUALLY OR SMALL CRANE LIFTED TO DEGATING AREAS.
AL-130-14	DUMPING COOLED MOLDS FROM THE SHAKE OUT RAILS ONTO A VIBRATING CONVEYOR WHICH TRANSPORTS CASTINGS AND SAND TO A SEPARATION SCREEN WHICH SIFTS SAND ONTO BELT CONVEYORS BELOW THAT CARRY IT PAST SWITCH-ACTIVATED WATER INJECTORS TO SIMILAR SWITCH-ACTIVATED FRESH SAND ADDERS BEFORE TRANSPORTING IT TO THE SAND STORAGE BIN WHILE CASTINGS ARE EITHER MANUALLY OR SMALL CRANE LIFTED TO DEGATING AREAS.
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